



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-8431; Directorate Identifier 2015-NM-128-AD; Amendment 39-18517; AD 2016-10-06]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc. Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Bombardier, Inc. Model BD-700-1A10 and BD-700-1A11 airplanes. This AD was prompted by a determination that the network interface installed between the Information Management System (IMS) 6000 unit and the Cabin Entertainment System (CES) network could affect the Aircraft Control Domain (ACD), and result in the transmission of misleading navigational information to the flightcrew. This AD requires inspecting the network interface installation between the IMS and the CES, and disconnecting the installation, if necessary. We are issuing this AD to prevent the transmission of misleading navigational information, which could adversely affect the ability of the flightcrew to maintain the safe flight and landing of the airplane.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Bombardier, Inc., 400 Côte Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514 855-7401; email thd.crj@aero.bombardier.com; Internet <http://www.bombardier.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-8431.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-8431; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone 800-647-5527) is Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Assata Dessaline, Aerospace Engineer, Avionics and Services Branch, ANE-172, FAA, New York Aircraft

Certification Office (ACO), 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7301; fax 516-794-5531.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Bombardier, Inc. Model BD-700-1A10 and BD-700-1A11 airplanes. The NPRM published in the Federal Register on January 13, 2016 (81 FR 1568) (“the NPRM”). The NPRM was prompted by a determination that the network interface installed between the IMS 6000 unit and the CES network could affect the ACD, and result in the transmission of misleading navigational information to the flightcrew. The NPRM proposed to require inspecting the network interface installation between the IMS and the CES, and disconnecting the installation, if necessary. We are issuing this AD to prevent the transmission of misleading navigational information, which could adversely affect the ability of the flightcrew to maintain the safe flight and landing of the airplane.

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF-2015-19, dated July 20, 2015 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Bombardier, Inc. Model BD-700-1A10 and BD-700-1A11 airplanes. The MCAI states:

It was discovered that on certain aeroplanes, the network interface installed between the Information Management System (IMS) 6000 unit and the Cabin Entertainment System (CES) network may affect the Aircraft Control

Domain (ACD). This could potentially compromise the operational integrity of the avionics system and result in misleading navigational information to the flight crew. Misleading navigational information could have adverse effects on the safe operation of the aeroplane.

This [Canadian] AD mandates the [general visual] inspection [to determine if pins are present at positions 25, 27, 48, and 50] and disconnection, as required, of the network interface installation between the IMS and the CES.

You may examine the MCAI in the AD docket on the Internet at

<http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-8431.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM or on the determination of the cost to the public.

Conclusion

We reviewed the relevant data and determined that air safety and the public interest require adopting this AD as proposed, except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

Related Service Information under 1 CFR part 51

Bombardier has issued the following service information, which describes procedures for inspecting the network interface installation between the IMS and the CES, and disconnecting the installation, if necessary.

- Service Bulletin 700-46-5005, Revision 02, dated June 18, 2015 (for Model BD-700-1A11 airplanes).
- Service Bulletin 700-46-6005, Revision 02, dated June 18, 2015 (for Model BD-700-1A10 airplanes).

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

We estimate that this AD affects 77 airplanes of U.S. registry.

We also estimate that it takes about 1 work-hour per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$6,545, or \$85 per product.

In addition, we estimate that any necessary follow-on action takes about 3 work-hours, for a cost of \$255 per product. We have no way of determining the number of aircraft that might need this action.

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not

control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a "significant regulatory action" under Executive Order 12866;

2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);

3. Will not affect intrastate aviation in Alaska; and

4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2016-10-06 Bombardier, Inc.: Amendment 39-18517. Docket No. FAA-2015-8431; Directorate Identifier 2015-NM-128-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to the Bombardier, Inc. airplanes, certificated in any category, specified in paragraphs (c)(1) and (c)(2) of this AD.

(1) Model BD-700-1A10 airplanes, serial numbers 9381, 9432 through 9708 inclusive; 9711 through 9718 inclusive; and 9720 through 9730 inclusive.

(2) Model BD-700-1A11 airplanes, serial numbers 9386, 9401, 9445 through 9707 inclusive; 9710 through 9717 inclusive; and 9722, 9732, 9734, and 9737.

(d) Subject

Air Transport Association (ATA) of America Code 34, Navigation.

(e) Reason

This AD was prompted by a determination that the network interface installed between the Information Management System (IMS) 6000 unit and the Cabin Entertainment System (CES) network could affect the Aircraft Control Domain (ACD), and result in the transmission of misleading navigational information to the flightcrew. We are issuing this AD to prevent the transmission of misleading navigational information, which could adversely affect the ability of the flightcrew to maintain the safe flight and landing of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Inspection and Disconnection, if Necessary

Within 15 months after the effective date of this AD: Do a general visual inspection of the network interface installation between the IMS and CES to determine if pins are present at positions 25, 27, 48, and 50; and if any pins are present, before further flight, disconnect the installation; in accordance with the Accomplishment Instructions of the applicable service information specified in paragraph (g)(1) or (g)(2) of this AD.

(1) Bombardier Service Bulletin 700-46-5005, Revision 02, dated June 18, 2015 (for Model BD-700-1A11 airplanes).

(2) Bombardier Service Bulletin 700-46-6005, Revision 02, dated June 18, 2015 (for Model BD-700-1A10 airplanes).

(h) Credit for Previous Actions

This paragraph provides credit for the actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using the service information specified in paragraph (h)(1), (h)(2), (h)(3), or (h)(4) of this AD, as applicable. This service information is not incorporated by reference in this AD.

(1) Bombardier Service Bulletin 700-46-5005, dated February 23, 2015.

(2) Bombardier Service Bulletin 700-46-5005, Revision 01, dated March 20, 2015.

(3) Bombardier Service Bulletin 700-46-6005, dated February 23, 2015.

(4) Bombardier Service Bulletin 700-46-6005, Revision 01, dated March 20, 2015.

(i) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York Aircraft Certification Office (ACO), ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, New York ACO, ANE-170, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.'s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(j) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Airworthiness Directive CF-2015-19, dated July 20, 2015, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-8431.

(2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (k)(3) and (k)(4) of this AD.

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Bombardier Service Bulletin 700-46-5005, Revision 02, dated June 18, 2015.

(ii) Bombardier Service Bulletin 700-46-6005, Revision 02, dated June 18, 2015.

(3) For service information identified in this AD, contact Bombardier, Inc., 400 Côte Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514 855-7401; email thd.crj@aero.bombardier.com; Internet <http://www.bombardier.com>.

(4) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:
<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on May 6, 2016.

Michael Kaszycki,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.
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